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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/042,143	LIN ET AL.	
	Examiner	Art Unit	
	Alicia Baturay	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-12,14-23,25-34 and 36-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-12,14-23,25-34 and 36-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/07/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the amendment filed 05 September 2008.

2. Claims 1, 6, 10, 12, 23, 34, 36, 27 and 39 were amended.

3. Claims 2, 13, 24 and 35 were cancelled.

4. Claims 1, 3-12, 14-23, 25-34 and 36-44 are pending in this Office Action.

Response to Amendment

5. Applicant's amendments and arguments with respect to claims 1, 3-12, 14-23, 25-34 and 36-44 filed on 05 September 2008 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Objections

6. Claim 34 is objected to because of the following informalities: on line 3, Applicant writes "Phoneline Network (HPN) frames, each (HPN) frame..." It is thought Applicant meant to remove the parentheses from the second recitation of the HPN acronym. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3-5, 7-9, 11, 12, 14-23, 25-34, 38 and 40-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil et al. (U.S. 6,732,315) in view of Mallory (U.S. 6,954,800) and further in view of Netravali et al. (U.S. 5,084,877).

Yagil teaches the invention substantially as claimed including a home networking transmitter, receiver, station, network manager, network and method adapted to network devices over phone lines in a home. A bandwidth other than the 4 to 10 MHz band defined in the HomePNA 2.0x. specification and a Baud rate higher than 4M baud may be used for communications between a plurality of devices. PHY and MAC layers are improved to increase the performance of home phone line networks (see Abstract).

9. With respect to claim 12, Yagil teaches a method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising the steps of: transmitting the plurality of Home Phoneline Network frames on the communications medium, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); transmitting a message from a Media Control Station (MC STA) (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network frames are transmitted (Yagil, Fig. 4,

element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41); and receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network frames are transmitted (Yagil, col. 10, lines 23-28).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to

enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

10. With respect to claim 14, Yagil teaches the invention described in claim 12, including the method where each blocking frame comprised by the plurality of Home Phoneline Network frames includes a Blocking Frame Type field (Yagil, col. 9, line 60 – col. 10, line 2).

11. With respect to claim 15, Yagil teaches the invention described in claim 14, including the method where information contained in the Blocking Frame Type field identifies a frame type that is known to a v2 STA (Yagil, col. 9, line 48 – col. 10, line 2).

12. With respect to claim 16, Yagil teaches the invention described in claim 14, including the method where information contained in the Blocking Frame Type field identifies a frame type that is unknown to a v2 STA (Yagil, col. 11, lines 11-28).

13. With respect to claim 17, Yagil teaches the invention described in claim 12, including the method where each blocking frame comprised by the plurality of Home Phoneline Network frames is assigned a highest HPNA v2 priority available in an HPNA v2 frame (Yagil, col. 10, lines 23-41).

14. With respect to claim 18, Yagil teaches the invention described in claim 12, including a method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising the steps of: transmitting the plurality of Home Phoneline Network frames on the communications medium, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); transmitting a message from a Media Control Station (MC STA) (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network frames are transmitted (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41); and receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network frames are transmitted (Yagil, col. 10, lines 23-28).

Yagil does not explicitly teach the use of a scrambler initialization field.

However, Mallory teaches the method where each blocking frame includes a scrambler initialization field having a fixed length (Mallory, col. 12, lines 57-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of a blocking frame type field. One would be motivated to do so in order to enhancing network transmission

between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

15. With respect to claim 19, Yagil teaches the invention described in claim 12, including a method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising the steps of: transmitting the plurality of Home Phoneline Network frames on the communications medium, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); transmitting a message from a Media Control Station (MC STA) (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network frames are transmitted (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41); and receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network frames are transmitted (Yagil, col. 10, lines 23-28).

Yagil does not explicitly teach the use of a scrambler initialization field.

However, Mallory teaches the method where each blocking frame includes a scrambler initialization field having a variable length (Mallory, col. 16, lines 2-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of a blocking frame type field. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

16. With respect to claim 20, Yagil teaches the invention described in claim 12, including the method where each blocking frame comprised by the plurality of Home Phoneline Netwok frames includes a payload encoding field (Yagil, col. 9, line 48 – col. 10, line 2).

17. With respect to claim 21, Yagil teaches the invention described in claim 20, including the method where each payload encoding field includes information that is known to a v2 STA (Yagil, col. 9, line 48 – col. 10, line 2).

18. With respect to claim 22, Yagil teaches the invention described in claim 21, including the method where each payload encoding field includes information that is unknown to a v2 STA (Yagil, col. 11, lines 11-28).

19. With respect to claim 34, Yagil teaches a communication network, comprising: a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots; and a communications signal in the communications medium having the plurality of Home Phoneline Network frames, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); a Media Control Station (MC STA) transmitting a message (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41) and during the Home Phoneline Network frames (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the MC STA receiving a reply message in response to the transmitted message from the at least one selected non-MC STA during the Home Phoneline Network frames (Yagil, col. 10, lines 23-28).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content, the blocking signal derived from a frame transmitted immediately prior to the IFG (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

20. Claims 1, 3-5, 7-9, 11, 23, 25-33, 38 and 40-49 do not teach or define any new limitations above claim 12 and 14-22 and therefore are rejected for similar reasons.

21. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil in view of Mallory in view of Netravali and further in view of Bertagna (U.S. 6,862,280).

22. With respect to claim 6, Yagil teaches the invention described in claim 1, including a method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising the steps of: transmitting the plurality of Home Phoneline Network frames on the communications medium, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); transmitting a message from a Media Control Station (MC STA) (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network frames are transmitted (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41); and receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network frames are transmitted (Yagil, col. 10, lines 23-28) and the method where each blocking frame comprised by the plurality of Home Phoneline Netwok frames is assigned a highest HPNA v2 priority available in an HPNA v2 frame (Yagil, col. 10, lines 23-41).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

The combination of Yagil, Mallory and Netravali does not explicitly teach remapping priorities of frames.

However, Bertagna teaches the MC STA adapted to remap priorities of the v2 STA at a link sublayer so that none of the data packets from an upper layer in the v2 STA is mapped to a physical priority level 7 of a Media Access Control sublayer (Bertagna, col. 8, line 58 – col. 9, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil, Mallory and Netravali in view of Bertagna in order to enable remapping priorities of frames. One would be motivated to do so in order to determine how fast the packet will be processed relative to other packets (Bertagna, col. 1, lines 14-17).

23. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil in view of Mallory in view of Netravali and further in view of Fickes et al. (U.S. 6,031,833).

24. With respect to claim 10, Yagil teaches the invention described in claim 9, including a method for providing access to a communications medium, the communications medium being suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots, the method comprising the steps of: transmitting the plurality of Home Phoneline Network frames on the communications medium, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG

(Yagil, col. 11, lines 51-67); transmitting a message from a Media Control Station (MC STA) (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA) when the Home Phoneline Network frames are transmitted (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41); and receiving a reply message to the transmitted message at the MC STA from a selected non-MC STA when the Home Phoneline Network frames are transmitted (Yagil, col. 10, lines 23-28) and the method where each payload encoding field includes information that is known to a v2 STA (Yagil, col. 9, line 48 – col. 10, line 2).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

The combination of Yagil, Mallory and Netravali does not explicitly teach the use of a Transmission Duration field in a frame header.

However, Fickes teaches each of the plurality of Home Phoneline Network frames comprising a Transmission Duration field in a frame header/preamble (Fickes, col. 3, line 63 – col. 4, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil, Mallory and Netravali in view of Fickes in order to enable the use of a Transmission Duration field in a frame header. One would be motivated to do so in order to maintain access to the network for a plurality of cooperating end stations established through continuous indication of the next end station without exceeding a maximum access time (Fickes, col. 2, lines 5-8).

25. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil in view of Mallory in view of Netravali and further in view of Perlman et al. (U.S. 6,996,712).

26. With respect to claim 36, Yagil teaches the invention described in claim 34, including a communication network, comprising: a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots; and a communications signal in the communications medium having the plurality of Home Phoneline Network frames, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); a Media Control Station (MC STA) transmitting a message (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41) and during the Home Phoneline Network frames (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the MC STA receiving a reply message in response to the transmitted message from the at least one selected non-MC STA during the Home Phoneline Network frames (Yagil, col. 10, lines 23-28) and the communications network wherein each blocking frame comprised by the plurality of Home Phoneline Network frames includes a Blocking Frame Type field (Yagil, col. 9, line 60 – col. 10, line 2).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content, the blocking signal derived from a frame transmitted immediately prior to the IFG (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

The combination of Yagil, Mallory and Netravali does not explicitly teach the use of chaff packets.

However, Perlman teaches the MC STA adapted to introduce a Chaff packet having no destination on the communications medium, the Chaff packet adapted to reverse the communications medium for the MC STA (Perlman, col. 8, lines 11-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil, Mallory and Netravali in view of Perlman in order to enable the use of chaff packets. One would be motivated to do so in order to inhibit a packet sniffing process by introducing extraneous data packets that intentionally fail the integrity checks (Perlman, col. 8, lines 11-20).

27. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil in view of Mallory in view of Netravali and further in view of Noll et al. (U.S. 6,377,998).

28. With respect to claim 37, Yagil teaches the invention described in claim 34, including a communication network, comprising: a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots; and a communications signal in the communications medium having the plurality of Home Phoneline Network frames, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); a Media Control Station (MC STA) transmitting a message (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and

col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41) and during the Home Phoneline Network frames (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the MC STA receiving a reply message in response to the transmitted message from the at least one selected non-MC STA during the Home Phoneline Network frames (Yagil, col. 10, lines 23-28) and the method where information contained in the Blocking Frame Type field identifies a frame type that is known to a v2 STA (Yagil, col. 9, line 48 – col. 10, line 2).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content, the blocking signal derived from a frame transmitted immediately prior to the IFG (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

The combination of Yagil, Mallory and Netravali does not explicitly teach the use of frames comprising a different End of Frame sequences.

However, Noll teaches each of the plurality of Home Phoneline Network frames comprising a different End of frame sequence than v2 STA frames (Noll, col. 12, lines 14-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil, Mallory and Netravali in view of Noll in order to enable the use of frames comprising different End of Frame sequences. One would be motivated to do so in order to improve frame processing for a network that supports high speed frame processing (Noll, col. 2, lines 51-53).

29. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yagil in view of Mallory in view of Netravali and further in view of Garg et al. (U.S. 6,862,630).

30. With respect to claim 39, Yagil teaches the invention described in claim 34, including a communication network, comprising: a communications medium that is suitable for allowing use of a plurality of Home Phoneline Network (HPN) frames, each HPN frame being timed to allow a plurality of physical layer priority level slots; and a communications signal in the communications medium having the plurality of Home Phoneline Network frames, each pair of Home Phoneline Network frames having timing to allow an Inter-Frame Gap (IFG), the IFG comprising a blocking signal, the blocking signal adapted to prevent an HPNA v2 station (v2 STA) from recognizing the IFG (Yagil, col. 11, lines 51-67); a Media Control Station (MC STA) transmitting a message (Yagil, Fig. 4, element 404; col. 5, lines 19-33 and col. 10, lines 33-41) to at least one selected non-Media Control Station (non-MC STA), the transmitted message being transmitted with a highest physical layer priority level available in an HPNA v2 frame (Yagil, col. 10, lines 23-41) and during the Home Phoneline Network frames (Yagil, Fig. 4, element 300; col. 5, lines 34-46 and col. 11, lines 51-67), the MC STA receiving a reply message in response to the transmitted message from the at least one selected non-MC STA during the Home Phoneline Network frames (Yagil, col. 10, lines 23-28).

Yagil does not explicitly teach the IFG having a duration greater than zero microseconds.

However, Mallory teaches an IFG having a duration greater than zero microseconds (Mallory, col. 23, lines 54-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yagil in view of Mallory in order to enable the use of an IFG having a duration greater than zero microseconds. One would be motivated to do so in order to

enhancing network transmission between stations on a priority-enabled frame-based communications network, the communications network having multiple transmit priorities and transmitting frames such that a network access time to transmit a frame of a lower transmit priority is longer than a network access time to transmit a frame of a higher transmit priority (Mallory, col. 3, lines 57-63).

The combination of Yagil and Mallory does not explicitly teach the blocking signal not comprising frame content.

However, Netravali teaches the blocking signal not comprising frame content, the blocking signal derived from a frame transmitted immediately prior to the IFG (Netravali, col. 10, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil and Mallory in view of Netravali in order to enable the use of a blocking signal not comprising frame content. One would be motivated to do so in order to use a small portion of the bandwidth for periodic exchanges of states (Netravali, col. 2, lines 38-40).

The combination of Yagil, Mallory and Netravali does not explicitly teach the use of different pre-assigned Contention Resolution Protocol slots.

However, Garg teaches each of the MC STA and the non-MC STA having different pre-assigned Contention Resolution Protocol slots that have access priority over the v2 STA (Garg, col. 8, lines 43-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Yagil, Mallory and Netravali in view of Garg in

order to enable the use of different pre-assigned Contention Resolution Protocol slots. One would be motivated to do so in order provide a frame processing unit for transmitting data frames of varying priorities on a network medium (Garg, col. 2, lines 24-26).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
November 27, 2008

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2446